

REMARKS

Applicant respectfully requests reconsideration. Claims 40-42, 44, 45, 47-49 and 106-116 were previously pending in this application. Claim 109 has been amended. New claims 117-145 have been added. As a result, claims 40-42, 44, 45 47-49, and 106-145 are pending for examination, with claim 40 being the single independent claim. No new matter has been added.

Interview with Examiner

Applicant wishes to thank the Examiner for an in-person interview on June 1, 2005 with Kevin Linthicum (an inventor of this application) and Robert Walat (Applicant's representative). Applicant is filing herewith a response to the interview summary which provides a brief description of the exhibit shown during the interview.

Amendments to the Specification

Applicant has amended the specification to reflect the current status of patent applications that are incorporated by reference. Specifically, the specification has been amended to reflect that U.S. Patent Application Serial No. 09/792,414 has issued as U.S. Patent No. 6,611,002, and U.S. Patent Application Serial No. 09/736,972 has issued as U.S. Patent No. 6,649,287.

Objections to the Drawings

Fig. 16 was objected to because it was not clear whether reference number 120 referred to the third layer from the bottom or the second layer from the bottom. A Replacement Sheet for Fig. 16 is being filed herewith showing that reference number 120 refers to the third layer from the bottom.

Accordingly, withdrawal of this objection is respectfully requested.

Rejection of Claim 109 under 35 U.S.C. §112

Claim 109 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

Applicant has amended claim 109 to address this rejection.

Accordingly, withdrawal of the rejection of claim 109 under 35 U.S.C. §112 is respectfully requested.

Rejections of Claims 40, 42, 44, 47-49, 108, 111, 113 and 116 under 35 U.S.C. §103(a)

Claims 40, 42, 44, 47-49, 108, 111, 113 and 116 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,038,580 (Porret) in view of JP Patent No. 11-317546 (Inoue et al.).

As discussed during the interview, Applicant does not observe where Porret teaches or suggests a semiconductor device that comprises a first electrical contact formed over a portion of a gallium nitride material region and at least one via extending from a first side of the semiconductor device and having electrically conductive material formed therein, wherein the electrically conductive material is **electrically connected** to the first electrical contact as recited in independent claim 40. (Emphasis added). Applicant further notes that electrode E2 in FIG. 2 of Porret does not appear to be formed within the via as suggested in the Office Action. Inoue also fails to teach or suggest these features missing from Porret. Because the combination of Porret and Inoue fails to teach or suggest each claim limitation, claim 40 is not obvious in view of this combination for at least this reason.

Accordingly, for at least this reason, withdrawal of this rejection is respectfully requested.

Rejection of Claim 41 under 35 U.S.C. §103(a)

Claim 41 was rejected under 35 U.S.C. §103(a) as being unpatentable over Porret in view of Inoue as applied to claims 40, 42, 44, 47-49, 108, 111, 113 and 116, and further in view of U.S. Patent No. 6,069,394 (Hashimoto et al.).

Claim 41 depends from claim 40 which is patentable over the combination of Porret in view of Inoue for reasons noted above. Hashimoto fails to provide the above-noted deficiencies of the Porret and Inoue combination in connection with independent claim 40 and, thus, also dependent claim 41. For at least this reason, claim 41 is patentable over the combination of Porret in view of Inoue and further in view of Hashimoto.

Accordingly, withdrawal of this rejection is respectfully requested.

Rejection of Claim 45 under 35 U.S.C. §103(a)

The Examiner rejected claim 45 under 35 U.S.C. §103(a) as being unpatentable over Porret in view of Inoue as applied to claims 40, 42, 44, 47-49, 108, 111, 113 and 116, and further in view of U.S. Patent No. 4,582,952 (McNeely et al.).

Claim 45 depends from claim 40 which is patentable over the combination of Porret in view of Inoue for reasons noted above. McNeely fails to provide the above-noted deficiencies of the Porret and Inoue combination in connection with independent claim 40 and, thus, also dependent claim 45. For at least this reason, claim 45 is patentable over the combination of Porret in view of Inoue and further in view of McNeely.

Accordingly, withdrawal of this rejection is respectfully requested.

Rejections of Claims 106, 107, 112 and 115 under 35 U.S.C. §103(a)

Claims 106, 107, 112 and 115 were rejected under 35 U.S.C. §103(a) as being unpatentable over Porret in view of Inoue as applied to claims 40, 42, 44, 47-49, 108, 111, 113 and 116, and further in view of U.S. Patent No. 5,252,842 (Buck et al.).

Claims 106, 107, 112 and 115 depend from claim 40 which is patentable over the combination of Porret in view of Inoue for reasons noted above. Buck fails to provide the above-noted deficiencies of the Porret and Inoue combination in connection with independent claim 40 and, thus, also dependent claims 106, 107, 112 and 115. For at least this reason, claims 106, 107, 112 and 115 are patentable over the combination of Porret in view of Inoue and further in view of Buck.

Accordingly, withdrawal of this rejection is respectfully requested.

Rejections of Claims 109 and 110 under 35 U.S.C. §103(a)

Claims 109 and 110 were rejected under 35 U.S.C. §103(a) as being unpatentable over Porret in view of Inoue as applied to claims 40, 42, 44, 47-49, 108, 111, 113 and 116, and further in view of U.S. Patent No. 6,465,809 (Furukawa et al.).

Claims 109 and 110 depend from claim 40 which is patentable over the combination of Porret in view of Inoue for reasons noted above. Furukawa fails to provide the above-noted deficiencies of the Porret and Inoue combination in connection with independent claim 40 and

thus, also dependent claims 109 and 110. For at least this reason, claims 109 and 110 are patentable over the combination of Porret in view of Inoue and further in view of Furukawa.

Accordingly, withdrawal of this rejection is respectfully requested.

Rejection of claim 114 under 35 U.S.C. §103(a)

Claim 114 was rejected under 35 U.S.C. §103(a) as being unpatentable over Porret in view of Inoue et al.) as applied to claims 40, 42, 44, 47-49, 108, 111, 113 and 116, and further in view of U.S. Patent No. 6,232,623 (Morita et al.).

Claim 114 depends from claim 40 which is patentable over the combination of Porret in view of Inoue for reasons noted above. Morita fails to provide the above-noted deficiencies of the Porret and Inoue combination in connection with independent claim 40 and thus, also dependent claim 114. Accordingly, for at least this reason, claim 114 is patentable over the combination of Porret in view of Inoue and further in view of Morita.

Accordingly, withdrawal of this rejection is respectfully requested.

New Claims

Claims 117-145 have been added. These claims all depend ultimately from independent claim 40 which is patentable over the cited references for reasons noted above. Thus, these claims are also patentable over the cited references for at least these reasons.

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Art Unit: 2815

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

By:



Robert H. Walat, Reg. No. 46,324
Randy J. Pritzker, Reg. No. 35,986
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
Telephone: (617) 646-8000

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In the Drawings

A “Replacement Sheet” is attached which includes a clean version of amended Fig. 16. The attached sheet replaces the original sheet including Fig. 16.

Fig. 16 was amended to clarify that the reference number “120” refers to the third layer from the bottom.